# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/044,914 | 01/15/2002 | James Patrick Goodwin | 23452-505 | 4966 |

| 29315 7590 03/09/2006 | EXAMINER |
|---|---|
| MINTZ LEVIN COHN FERRIS GLOVSKY AND POPEO PC 12010 SUNSET HILLS ROAD SUITE 900 RESTON, VA 20190 | HIRL, JOSEPH P |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2129 | |

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) |
|---|---|---|---|
| **Office Action Summary** | | 10/044,914 | GOODWIN ET AL. |
| | | Examiner | Art Unit | |
| | | Joseph P. Hirl | 2129 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>20 December 2005</u>.

2a)☐ This action is **FINAL**.  2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>1-25</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-25</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>15 January 2002</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>080506</u>.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail. Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

## DETAILED ACTION

1.      This Office Action is in response to an AMENDMENT entered December 20,

2005 for the patent application 10/044,914 filed on January 15, 2002.

2.      The First Office Action of August 11, 2005 is fully incorporated into this Office

Action by reference.

### *Information Disclosure Statement*

3.      The records show that the IDS filed September 2, 2005 was not electronically

signed.  This objection will remain until the subject IDS is signed.  Examiner suggest

that the applicant submit a second IDS corresponding to that submitted on September

2, 2005 and insure that it is electronically signed.  Until this is accomplished, the

objection will remain and no action will be taken on the unsigned IDS.

### *Claim Objections*

4.      Claims 12,  17, 18 and 22 are of an improper Markush form and must be

corrected.

### *Claim Rejections - 35 USC § 101*

5.      35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6.      Claims 1-25 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.   The claims do not identify a practical application that produces a useful, tangible and concrete result using the claimed methodology. Rubber-Tip Pencil Co. v. Howard, 87 U.S. (20 Wall.) 498, 507 (1874)5. A result that is a practical application has useful, concrete and tangible features.   To be useful, the invention must have results that are specific, substantial and creditable. Claims 1-25 do not have specific results.  Simply, receiving and storing values, creating a product, processing code for calculating a metric value, developing a message regarding affinity values,  affinity values based on metric values, metrics reflecting the value of content, adding metric values, ranking metric values, determine a predetermine scheme, link combinations, ranking raw metric values, enabling a user to set a predetermine scheme, automatically determining a predetermine scheme, public or private affinity values, sending value to mailboxes related to thresholds, enabling of threshold represent abstract concepts and do not have specific results.  Further claims 1-25 for the same examples represent methodology or algorithms and therefore are abstract.  Abstractness is the opposite of tangibility and therefore Claims 1-25 do not have tangible results.

The USPTO published the "Interim Guidelines for Examination of Patent Applications for Subject Matter Eligibility" on October 26, 2005 and posted  such guidelines to the uspto.gov website.  Such guidelines supersede those used in the initial

examination dated August 11, 2005 and replace section 2106 of the MPEP. Because of

the application of the new standard, this examination will be non final.


### *Claim Rejections - 35 USC § 102*

7.      The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public
> use or on sale in this country, more than one year prior to the date of application for patent in the United
> States.

8.      Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by

Karmarkar (U.S. Patent 4,744,028, referred to as Karmarkar).

**Claim 1**

Karmarkar anticipates a data repository that stores a plurality of documents

(**Karmarkar**, c 3, I 11-24; Examiner's Note (EN): para 15. applies; documents are data

or constraints ); c 11, a discovery server that creates and maintains a knowledge map

representing relationships between the documents in the data repository and a plurality

of categories (**Karmarkar**, c 1, I 5-11; c 11, I 18-34; c 2:29-52; c 13, I 44-48; EN: relates

to the map of Karmarkar, Fig.1 that illustrates constraint relationships and relationships

between constraints ... or a map representing relationships between documents and

categories ... the limitation of storage is not functionally discriminating); a metrics

calculator that calculates values representative of the relationships between the

documents and the categories (system resources) (**Karmarkar**, c 11, I 18-34; EN:

metrics are the cost data) and a data source in communication with the discovery server

that receives and stores the values from the metrics calculator (**Karmarkar**, c 11, l 18-

34; EN: such is the cost register (81)).

**Claim 2/3**

Karmarkar anticipates determining a raw metric value for a resource that

corresponds to a action on or by the resource (**Karmarkar**, c 11, l 54-60; EN: such are

the constraint sensors); ranking the raw metric value according to a predetermined

scheme (**Karmarkar**, Fig. 4, item 165; EN: steepest decent process will prioritize or

rank the raw metric); determining a constant value based, at least in part, upon the

ranking of the raw metric (**Karmarkar**, c 7, l 26-30; EN: the new iterate is equal to the

current iterate or constant for the next iterate); and calculating a metric value

proportional to a product of the raw metric value and the constant value (**Karmarkar**,

Fig. 4, item 167).

**Claim 4**

Karmarkar anticipates a metrics calculator that calculates values that represent

the relationships between the documents stored in the knowledge discovery system and

the categories in the knowledge discovery system (**Karmarkar**, c 2, l 18-34; EN: metrics

are the cost data); a metrics affinity calculator that calculates affinity values for

resources (**Karmarkar**, c 11, l 18-34; EN: affinity values are the relationship cost data);

a metrics data store that stores the calculated affinity values (**Karmarkar**, c 11, l 18-34;

EN: such is the cost register (81)); a metrics affinity module that sends at least one

message to a user mailbox associated with the user according to a predetermined

setting, the at least one message regarding the calculated affinity (**Karmarkar**, Fig. 4,

item 167; EN: para 15 applies; messages are yes or no sent toeither box 169 or box

168).

**Claim 5**

Karmarkar anticipates calculating metric values that represent the relationships

between the documents stored in the knowledge discovery system and the categories in

the knowledge discovery system (**Karmarkar**, c 11, l 18-34; EN: metrics are the cost

data), calculating affinity values for using an affinity calculator, the affinity values

representing the relationships between the user and at least some of the categories in

the knowledge discovery system, the affinity values being calculated based on the

metric values and at least one interaction of the user with the documents (**Karmarkar**, c

1, l 6-11; 11, l 18-34; EN: affinity values are the relationship cost data); storing the

calculated affinity values in a metrics data store (**Karmarkar**, c 11, l 18-34; EN: such is

the cost register (81)); sending at least one message to a user mailbox with the user

according to a predetermined setting, the at least one message regarding the calculated

affinity (**Karmarkar**, para 15 applies; user is the operator of the Fig. 4 algorithm with

boxes 168 and 169; box 167 has a predetermined).

### *Response to Arguments*

9.     The objection to the specification is withdrawn.

10.     With the Applicant's amendments to Claims 4 and 5, the rejection of Claims 4

and 5 under 35 U.S.C. 101 related to an affinity worker is withdrawn.

11.     Applicant's arguments filed on December 20, 2005 related to subject claims have

been fully considered but are not persuasive.

In reference to Applicant's argument:

Applicants hereby acknowledge receipt of initialed and signed copies of PTO1449 forms corresponding to
IDSs filed July 15, 2002, March 22, 2005, and May 23, 2005, which indicate that the Examiner has
considered all of the references provided therein. Applicants also received a signed copy of a PTO-1449
form corresponding to an IDS filed August 5, 2004 ("the 8/05/2004 IDS"). However, the Examiner failed to
initial next to all of the references included in the 8/05/2004 IDS. Applicants request that the Examiner
provide an initialed and signed copy of the PTO-1449 form corresponding to the 8/05/2004 IDS that
acknowledges that all of the references included in the 8/05/2004 IDS have been considered by the
Examiner.

In the Office Communication mailed December 1, 2005, the Examiner alleges that the IDS filed
September 2, 2005 was not signed and could not be entered into the system. However, the IDS filed
September 2, 2005 ("the 9/02/2005 IDS"), was filed electronically, and therefore was electronically signed
for submission. If the 9/02/2005 IDS had not been electronically signed, it could not have been submitted.
Accordingly Applicants that the Examiner provide an initialed and signed copy of the PTO-1449

Examiner's response:

        Examiner will submit an executed IDS corresponding to a filing date of August 5,

2004 with this office action.  Regarding the IDS filed on September 2, 2005, the record

indicates that this submission was not signed electronically.  This objection will remain

until the subject IDS is signed.  Examiner suggest that the applicant submit a second

IDS corresponding to that submitted on September 2, 2005 and insure that it is

electronically signed.  Until this is accomplished, the objection will remain and no action

will be taken on the unsigned IDS.


In reference to Applicant's argument:

Claim 2 stands rejected less than 35 U.S.C. § 101 as allegedly being directed to non-statutory subject
matter. More particularly, the Examiner asserts that the language of the claim raises a question as to
whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment
or machine. See the 8/11/2005 Office Action at page 3. This is not a proper ground for a rejection under
§101. However, solely in an effort to expedite prosecution, Applicants have amended claim 2 to obviate
this rejection.

Examiner's response:

Applicant is invited to return to the 8/11/05 Office Action and to further review the

"Interim Guidelines for Examination of Patent Applications for Subject Matter Eligibility"

which was posted on the uspto.gov website on October 26, 2005. Claim 2 fails to cite a

practical application producing a concrete, useful and tangible result. More specifically,

Claim 2 does not produce a tangible result ... one merely has a metric value that is

floating around somewhere in a computer ...

In reference to Applicant's argument:

Claim 1 recites, inter alia, "a discovery server that creates and maintains a knowledge map representing
relationships between the documents stored in the data repository and a plurality of categories." ...
Karmarkar does not disclose a discovery server that creates and maintains a knowledge map
representing relationships between the documents stored in the data repository and a plurality of
categories.

Examiner's response:

¶ 13. applies. Limitations appearing in the specification but not recited in the

claim are not read into the claim. The Examiner has full latitude to interpret each claim

in the broadest reasonable sense. Karmarkar @ c 2:29-52 relates to the map of Fig.1

that illustrates constraint relationships anticipating a map and relationships between

constraints ... or a map representing relationships between documents and categories

... the limitation of storage is not functionally discriminating ... documents are data.

In reference to Applicant's argument:

Claim 2 includes "calculating a metric value proportional to a product of the raw metric value and the
constant value," among other things. Claim 3 recites similar subject matter, among other things. In an
exemplary embodiment, a raw metric value may correspond to a count of a certain type of action. A
metric value may then be determined from the raw metric value by multiplying the raw metric value by a

constant that is assigned to the raw metric based on a ranking of the action that corresponds to the raw metric. See the specification at page 16, lines 10-22; and Table 1.

Examiner's response:

¶ 13. applies. Limitations appearing in the specification but not recited in the

claim are not read into the claim. The Examiner has full latitude to interpret each claim

in the broadest reasonable sense. Claim 2 is independent of Claim 3.

In reference to Applicant's argument:

The Examiner asserts that this feature is disclosed in Karmarkar at FIG. 4, element 167. See the 8/05/2005 Office Action. However, decision box 167 of Karmarkar appears to function to terminate a procedure when no significant improvement in the objective function is observed, or beginning another iteration if improvement is still being made. See Karmarkar at col. 7, lines 26-30. Within FIG. 4, Karmarkar appears to disclose determining whether improvement is still being made by taking a quotient of two values. Karmarkar does not disclose calculating a metric value proportional to a product of the raw metric value and the constant value. For at least this reason, the rejection of claims 2 and 3 should be withdrawn.

Examiner's response:

¶ 13. applies. Limitations appearing in the specification but not recited in the

claim are not read into the claim. The Examiner has full latitude to interpret each claim

in the broadest reasonable sense. The ratio is calculating a metric value proportional to

a product of the raw metric value and the constant value. Applicant admits that

Karmarkar makes a calculation ... hence the rejection stands.

In reference to Applicant's argument:

Claim 4 recites, inter alia, a metrics affinity module that sends at least one message to a user mailbox associated with the user according to a predetermined setting, the at least one message regarding the calculated affinity values. Claim 5 includes similar subject matter, among other things. In an exemplary embodiment, a metrics affinity worker may send out a message (e.g., an e-mail message) with a proposal of discovered affinities to a user. See the specification at page 14, lines 7-10. The metrics affinity worker may send out a message based on an affinity value rising above a pre-determined threshold. See id. at page 11, lines 5-9.

Examiner's response:

¶ 13. applies. Limitations appearing in the specification but not recited in the

claim are not read into the claim. The Examiner has full latitude to interpret each claim

in the broadest reasonable sense. Claim 4 is independent of Claim 5. Applicant has

removed the "worker" from the subject claims.


In reference to Applicant's argument:

The Examiner asserts that this feature is anticipated by element 167 of FIG. 4. The disclosure of
Karmarkar with respect to this element was discussed above, and appears to describe a process step
that decides whether to end a process, or initiate another iteration. However, Karmarkar does not teach a
metrics affinity module that sends at least one message to a user mailbox associated with the user
according to a predetermined setting, the at least one message regarding the calculated affinity values.

Examiner's response:

¶ 13. applies. Limitations appearing in the specification but not recited in the

claim are not read into the claim. The Examiner has full latitude to interpret each claim

in the broadest reasonable sense. Applicant argues in the response dated December

20, 2005, on page 10, lines 11-19, that the affinity worker is represented by software.

Hence, a decision process as identified in Fig. 4 is appropriate ... sends a yes or no

message to appropriate boxes.


### Examination Considerations

12.     The claims and only the claims form the metes and bounds of the invention.

"Office personnel are to give the claims their broadest reasonable interpretation in light

of the supporting disclosure. *In re Morris,* 127 F.3d 1048, 1054-55, 44USPQ2d 1023,

1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d, 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, l 45-48; p 2100-9, c 1, l 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

13.     Examiner's Notes are provided with the cited references to prior art to assist the applicant to better understand the nature of the prior art, application of such prior art and, as appropriate, to further indicate other prior art that maybe applied in other office actions. Such comments are entirely consistent with the intent and spirit of compact prosecution. However, and unless otherwise stated, the Examiner's Notes are not prior art but a link to prior art that one of ordinary skill in the art would find inherently appropriate.

14.     Unless otherwise annotated, Examiner's statements are to be interpreted in reference to that of one of ordinary skill in the art. Statements made in reference to the condition of the disclosure constitute, on the face of it, the basis and such would be obvious to one of ordinary skill in the art, establishing thereby an inherent prima facie statement.

15.     Examiner's Opinion: ¶¶ 12-14 apply. The Examiner has full latitude to interpret each claim in the broadest reasonable sense.

## *Conclusion*

16.    Claims 1-25 are rejected.


## *Correspondence Information*

17.    Any inquiry concerning this information or related to the subject disclosure

should be directed to the Primary Examiner, Joseph P. Hirl, whose telephone number is

(571) 272-3685.  The Examiner can be reached on Monday – Thursday from

6:00 a.m. to 4:30 p.m.

   If attempts to reach the Examiner by telephone are unsuccessful, the

Examiner's supervisor, David R. Vincent can be reached at (571) 272-3080.

Any response to this office action should be mailed to:

   Commissioner of Patents and Trademarks,

   Washington, D. C. 20231;

Hand delivered to:

   Receptionist,

   Customer Service Window,

   Randolph Building,

   401 Dulany Street,

   Alexandria, Virginia 22313,

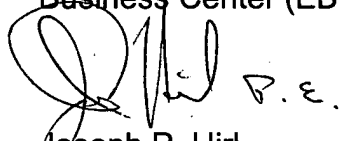   (located on the first floor of the south side of the Randolph Building);

or faxed to:

(571) 273-8300 (for formal communications intended for entry.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have any questions on access to Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll free).

Joseph P. Hirl
Primary Examiner
March 2, 2006